

Instructions:

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2. Circle the correct answers on the answer sheet.
3. Page down to the last page for the verification forms and mailing instructions.

4 Hour Quiz

1. The NEC term to define wiring methods that are not concealed is ____.

- a. exposed
- b. open
- c. uncovered
- d. bare

2. The residual voltage of a capacitor; rated not over 600V; shall be reduced to 50V; nominal; or less within ____ after the capacitor is disconnected from the source of supply.

- a. 2 minutes
- b. 45 seconds
- c. 15 seconds
- d. 1 minute

3. The Code defines a ____ as; all circuit conductors between the service equipment; the source of a separately derived system; or other power supply source and the final branch-circuit overcurrent device.

- a. feeder
- b. service
- c. all of these
- d. branch circuit

4. Underground rigid nonmetallic (conduit) wiring that is located less than 5 ft from the inside wall of the pool or spa must be buried not less than ____ in.

- a. 10
- b. 12
- c. 6
- d. 18

5. The requirement for maintaining a 3 ft vertical clearance from the edge of the roof shall not apply to the final conductor span where the service drop is attached to ____.

- a. a service pole
- b. the side of a building
- c. an antenna
- d. the base of a building

6. The service conductors between the terminals of the service equipment and a point usually outside the building; clear of building walls; where joined by tap or splice to the service drop is called ____ service entrance conductors.

- a. complete
- b. underground
- c. overhead
- d. grounded

7. Where an internal combustion engine is used as the prime-mover for an emergency system; an onsite fuel supply shall be provided with an on-premise fuel supply for not less than ____ hours' full-demand operation of the system.

- a. 4
- b. 3
- c. 2

d.5

8. The distance between a cable or conductor entry and its exit from the box shall be not less than _____ times the outside diameter; over sheath; of that cable or conductor on a 1000V system.

- a. 16
- b. 18
- c. 36
- d. 40

9. The minimum and maximum size of EMT is _____ to _____ in.; except for special installations.

- a. 5/16; 3
- b. 3/8; 4
- c. 1/2; 3
- d. 1/2; 4

10. The disconnecting means for air-conditioning and refrigerating equipment must be _____ from the air-conditioning or refrigerating equipment.

- a. either of these
- b. both of these
- c. within sight
- d. readily accessible

11. The branch-circuit conductor and overcurrent protection device for fixed electric space-heating equipment loads shall not be smaller than _____ percent of the total load.

- a. 125
- b. 100
- c. 80
- d. 150

12. The grounding of electrical systems; circuit conductors; surge arresters; and conductive non-current-carrying materials and equipment shall be installed and arranged in a manner that will prevent objectionable current over the grounding conductors or grounding paths.

- a. True
- b. False

13. The conductors; including splices and taps; in a metal surface raceway shall not fill the raceway to more than _____ percent of its cross-sectional area at that point.

- a. 53
- b. 38
- c. 40
- d. 75

14. The connected load to which the demand factors of Table 220.32 apply shall include the _____ rating of all appliances that are fastened in place; permanently connected or located to be on a specific circuit; such as ranges; wall-mounted ovens; counter-mounted cooking units; clothes dryers; water heaters; and space heaters.

- a. calculated
- b. circuit
- c. nameplate
- d. overcurrent protection

15. The number of conductors permitted in a raceway shall be limited to _____.

- a. all of these
- b. prevent damage to insulation during removal of conductors
- c. permit heat to dissipate

d. prevent damage to insulation during installation

16. The maximum allowable hp rating of a permanently-connected appliance; when the branch-circuit overcurrent protection device is used as the appliance disconnecting means; is _____-hp or 300 VA.

- a. 1/4
- b. 1/8
- c. 3/4
- d. 1/2

17. X-ray equipment mounted on a permanent base equipped with wheels and/or casters for moving while completely assembled is defined as _____.

- a. mobile
- b. movable
- c. room
- d. portable

18. The equipment grounding conductor shall be identified by _____.

- a. a continuous outer-green finish
- b. any of these
- c. being bare
- d. a continuous outer-green finish with one or more yellow stripes

19. The noncurrent-carrying metal parts of equipment; such as _____; shall be effectively bonded together.

- a. the metallic raceway or armor enclosing a grounding electrode conductor
- b. all of these
- c. service raceways; cable trays; or service cable armor
- d. service equipment enclosures containing service conductors; including meter fittings; boxes; or the like; interposed in the service raceway or armor

20. The demand percentage used to calculate 45 receptacles in a boatyard feeder is _____ percent.

- a. 80
- b. 90
- c. 70
- d. 50

21. The overall covering of UF cable shall be _____.

- a. flame retardant
- b. all of these
- c. suitable for direct burial in the earth
- d. moisture; fungus; and corrosion resistant

22. The small-appliance branch circuits can supply the _____ as well as the kitchen.

- a. breakfast room
- b. refrigerator
- c. all of these
- d. dining room

23. The raceway or cable for tap conductors to recessed luminaires shall have a minimum length of _____ in.

- a. 18
- b. 12
- c. 24
- d. 6

24. The grounding electrode conductor at the service is permitted to terminate on an equipment grounding terminal bar if a (main) bonding jumper is installed between the grounded conductor bus and the equipment grounding terminal.

- a. True
- b. False

25. The phase converter disconnecting means shall be _____ and located in sight from the phase converter.

- a. easily visible
- b. readily accessible
- c. protected from physical damage
- d. clearly identified

26. The requirement for maintaining a 3 ft vertical clearance from the edge of the roof shall not apply to the final conductor span where the conductors are attached to _____.

- a. a building pole
- b. the side of a building
- c. the base of a building
- d. an antenna

27. The disconnecting means for a torque motor shall have an ampere rating of at least _____ percent of the motor nameplate current.

- a. 100
- b. 125
- c. 175
- d. 115

28. The maximum internal current that can flow through the line isolation monitor when any point of the isolated system is grounded shall be _____ when used in a health care facility.

- a. 15A or less
- b. no more than 1A
- c. 10 mA
- d. 1 mA

29. The connection of the grounding electrode conductor to a buried grounding electrode (driven ground rod) shall be made with a listed terminal device that is accessible.

- a. False
- b. True

30. The radius of the curve of the inner edge of any bend shall not be less than _____ for AC cable.

- a. three times the diameter of the cable
- b. six times the outside diameter of the conductors
- c. five times the largest conductor within the cable
- d. five times the diameter of the cable

31. The service disconnecting means shall be installed at a(n) _____ location.

- a. indoor
- b. dry
- c. outdoor
- d. readily accessible

32. The demand factors of Table 220.20 apply to space heating; ventilating; or air-conditioning equipment.

- a. True
- b. False

33. The motor disconnecting means can be a _____.

- a. circuit breaker
- b. motor-circuit switch rated in horsepower
- c. any of these
- d. molded case switch

34. The conductor insulation of MI cable shall be a highly-compressed refractory mineral that will provide proper _____ for all conductors.

- a. none of these
- b. covering
- c. spacing
- d. resistance

35. The patient care area is any portion of a health care facility where patients are intended to be _____.

- a. registered
- b. examined or treated
- c. treated
- d. examined

36. The conductors between the final overcurrent protection device and the outlet(s) are known as the _____ conductors.

- a. home run
- b. none of these
- c. feeder
- d. branch-circuit

37. The secondary circuits of current and potential instrument transformers shall be grounded where the primary windings are connected to circuits of _____ volts or more to ground and; where on switchboards; shall be grounded irrespective of voltage.

- a. 600
- b. 300
- c. 150
- d. 1000

38. The building disconnecting means shall be installed at a(n) _____ location.

- a. outdoor
- b. accessible
- c. indoor
- d. readily accessible

39. The pilot light provided within a portable stage switchboard enclosure shall have overcurrent protection rated or set at not more than _____ amperes.

- a. 20
- b. 15
- c. 10
- d. 30

40. The highest current at rated voltage that a device is intended to interrupt under standard test conditions is the _____.

- a. manufacturer's rating
- b. GFCI rating
- c. interrupting rating
- d. interrupting capacity

41. The individual conductors in a cablebus shall be supported at intervals not greater than _____ ft for vertical runs.

- a. 1-1/2

- b. 1/2
- c. 1
- d. 2

42. The grounding conductor connection to the grounding electrode shall be made by _____.

- a. listed lugs
- b. listed pressure connectors
- c. exothermic welding
- d. any of these

43. The branch-circuit protective device shall be permitted to serve as the controller for a stationary motor rated at _____-hp or less that is normally left running and cannot be damaged by overload or failure to start.

- a. 1/2
- b. 1/4
- c. 1/8
- d. 3/8

44. The radius of the inner edge of any bend in MI cable shall not be less than five times the external diameter of the metallic sheath for cable not more than _____ inches in external diameter.

- a. 1-1/2
- b. 3/4
- c. 1/2
- d. 5/8

45. The disconnecting means for the controller and motor must open all ungrounded supply conductors and shall be designed so that no pole can be operated independently.

- a. True
- b. False

2011 Code Updates Part 1 Answer Sheet

1.	a b c d	10.	a b c d	19.	a b c d	28.	a b c d	37.	a b c d
2.	a b c d	11.	a b c d	20.	a b c d	29.	a b c d	38.	a b c d
3.	a b c d	12.	a b c d	21.	a b c d	30.	a b c d	39.	a b c d
4.	a b c d	13.	a b c d	22.	a b c d	31.	a b c d	40.	a b c d
5.	a b c d	14.	a b c d	23.	a b c d	32.	a b c d	41.	a b c d
6.	a b c d	15.	a b c d	24.	a b c d	33.	a b c d	42.	a b c d
7.	a b c d	16.	a b c d	25.	a b c d	34.	a b c d	43.	a b c d
8.	a b c d	17.	a b c d	26.	a b c d	35.	a b c d	44.	a b c d
9.	a b c d	18.	a b c d	27.	a b c d	36.	a b c d	45.	a b c d

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